

Claims

~~586A1~~ 1. *Pub B17*

A medical device, comprising:

a hollow housing;

a needle having a sharpened tip projecting forwardly from the housing;

a biasing element biasing the needle rearwardly;

a needle retainer releasably retaining the needle against the rearward bias of the biasing element

a flexible shield fixedly attached to the housing, projecting forwardly from the housing;

the shield being configured for insertion into a patient;

the shield sheathing the needle such that in the projecting position, the sharpened tip of the needle projects beyond the forward edge of the shield, and in the retracted position the sharpened tip is enclosed within the shield;

wherein upon actuation of the needle retainer, the biasing element displaces the needle rearwardly so that the sharpened tip of the needle is enclosed within the shield, wherein the shield is substantially puncture resistant wherein the axial force required to buckle the shield is less than the force necessary to puncture the shield with the needle to prevent inadvertent contact with the contaminated needle.

2. A method for infusing fluid into a patient with a medical device having a needle, comprising the steps of:
- inserting the needle into the patient;
- shielding the needle; and
- infusing fluid through the shielded needle into the patient.

3. The method of claim 2 comprising the step of providing a sheath

~~substantially sheathing the length of the needle.~~

4. ~~The method of claim 2 wherein the step of shielding comprises the step of displacing the needle rearwardly.~~

- Sub A2 5. A method for transfusing one of blood and plasma in or out of a patient with a medical device having a needle, comprising the steps of:
inserting the needle into the patient;
shielding the needle; and
transferring said one of blood and plasma through the shielded needle while a portion of the device is inserted in the patient.

6. ~~The method of claim 5 comprising the step of providing a sheath substantially sheathing the length of the needle.~~

7. ~~The method of claim 5 wherein the step of shielding comprises the step of displacing the needle rearwardly.~~

- Sub A3 8. A medical device, comprising:
a hollow housing;
a needle having a sharpened tip projecting forwardly from the housing;
a biasing element biasing the needle rearwardly;
a needle retainer releasably retaining the needle against the rearward bias of the biasing element
a shield fixedly attached to the housing, projecting forwardly from the housing;
the shield being configured for insertion into a patient;
the shield sheathing the needle such that in the projecting position, the sharpened tip of the needle projects beyond the forward edge of the shield, and in the retracted

position the sharpened tip is enclosed within the shield;
wherein upon actuation of the needle retainer, the biasing element
displaces the needle rearwardly so that the sharpened tip of the
needle is enclosed within the shield, wherein the shield is
substantially puncture resistant wherein the axial force required
to buckle the shield is less than the force necessary to puncture
the shield with the needle to prevent inadvertent contact with
the contaminated needle.

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